

Office of the President

TO MEMBERS OF THE FINANCE AND CAPITAL STRATEGIES COMMITTEE:

ACTION ITEM – CONSENT

For Meeting of September 13, 2017

APPROVAL OF PRELIMINARY PLANS FUNDING, NORTHERN REGIONAL LIBRARY FACILITY PHASE 4 EXPANSION, SYSTEMWIDE

EXECUTIVE SUMMARY

The University of California's 1977 plan¹ for library development included the creation of two regional storage facilities to house less-used library materials. Funding was appropriated in the 1980-81 Budget Act and the Northern Regional Library Facility (NRLF) opened to take deposits from UC Libraries in May 1983.

A Southern Regional Library Facility (SRLF), located on the Los Angeles campus, was funded later and began taking deposits in summer 1987. NRLF was expanded twice, in 1990 and 2005 and SRLF was expanded once, in 1996. At current deposit rates, the NRLF is projected to fill in 2018 and the SRLF between 2021 and 2022. With the SRLF unable to expand due to site constraints, a facility is required that will accommodate deposits from all ten campuses within a few years.

UC Libraries projects the need to store an additional 300,000 volumes off-site annually for the next decade. By building now, the libraries will stay just ahead of a systemwide library storage challenge and avoid campus costs and the disruption of planned uses of campus space.

The NRLF Phase 4 Expansion would add a fourth shelving module to house 3.1 million volumes and an adjacent staff area to support program activities and meet the projected systemwide deposit need until 2030.

This project was presented to the Finance and Capital Strategies Committee in July 2017 and this item is consistent with that discussion. In this action, the Regents are being asked to approve preliminary plans funding in the amount of \$600,000 to be funded from Strategic Priority Reserves resulting from one-time budget savings in prior year(s). The preliminary plans funding would support site surveys, specialty consultants, completion of project design and preparation

¹ University of California (System). Office of the Executive Director of Universitywide Library Planning. *The University of California Libraries: a plan for development, 1978-1988*. Berkeley: Office of the Executive Director of Universitywide Library Planning, 1977. Also called the *Salmon Report*.

of environmental documentation pursuant to the California Environmental Quality Act (CEQA). Full budget approval will be requested in subsequent Regents' actions. It should be noted that funding for the construction and equipment phases of this project are included in the 2018-19 Budget for State Capital Improvements that will also be presented to the Regents for discussion at this meeting.

RECOMMENDATION

The President of the University recommends that the Finance and Capital Strategies Committee recommend to the Regents that the 2018-19 Budget for Capital Improvements and the Capital Improvement Program be amended to include the following project:

Systemwide: Northern Regional Library Facility Phase 4 Expansion – preliminary plans – \$600,000 to be funded from Strategic Priority Reserves resulting from one-time budget savings in prior year(s).

BACKGROUND

Project Drivers

The major driver behind the expansion of Northern Regional Library Facility (NRLF) is the UC libraries' continuing need for low-cost storage for research materials. NRLF expansion space will allow campus libraries to save on local costs, build shared collections, support long-term preservation of materials, and utilize valuable core campus space in other ways.

There is still a strong demand for new print resources, especially in the arts and humanities, for historical and archival materials, and for foreign language materials. In addition, libraries are being pressed to move more of their existing collections off-campus to free up space for other campus priorities, including the creation of technology-rich teaching and learning spaces and collaborative work environments.

A 2012 survey of five-year collection growth in UC libraries indicated an anticipated need to store 300,000 volumes annually in the regional library facilities (RLFs) for a total of 1.7 million volumes by 2017². This projection has proved to be accurate, and the UC libraries anticipate that the need for storage will continue at this rate for the next ten years. Chart 1 illustrates RLF growth in capacity from 1983, projected to include the NRLF Phase 4 expansion. The projected fill rate to 2030 is based on current RLF allocations and driven by the projected growth rate.

Both RLFs are filling quickly. At the current deposit rate, the NRLF will be full in 2018 and the SRLF will be full between 2021 and 2022³. Expansion at the SRLF, however, is not possible due

² The survey of library needs was conducted by the Council of University Librarians in 2012. In a 2017 study of RLF deposits, a working group found that actual campus collection growth exceeded 300,000 volumes per year.

³ This assumes that when NRLF reaches capacity all deposits will be directed to SRLF. With NRLF Phase 4, SRLF's deposit lifespan extends to approximately 2024.

to site constraints. Chart 2 demonstrates when both RLFs will fill and the resulting deficits that will accrue without additional storage space. Building NRLF Phase 4 now allows the UC Libraries to stay ahead of this space crisis, and avoid campus costs and the disruption of planned uses of campus space for the next decade.

Chart 1: Current & Projected RLF Capacity

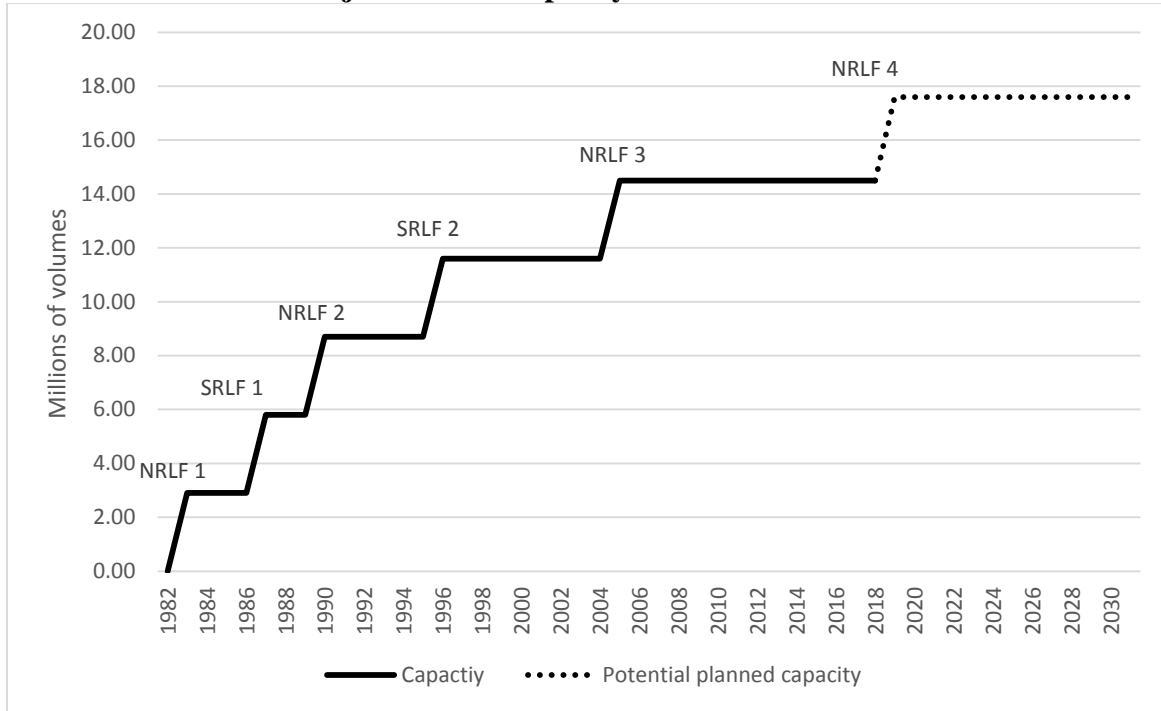
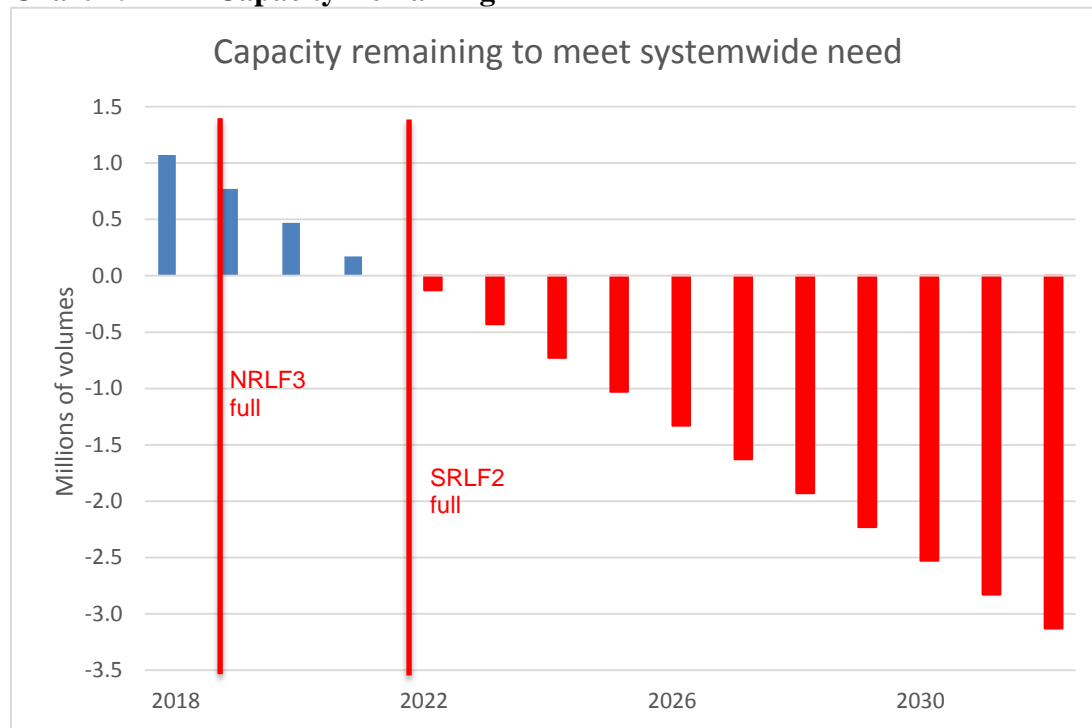


Chart 2: RLF Capacity Remaining



Project Description

The proposed NRLF Phase 4 addition is positioned to the west of Phase 2 and south of Phase 3. It will continue the NRLF’s main spine corridor, building on the modular design approach set out in previous phases of NRLF, and will be designed to fit with the overall design of the facility. The proposed addition would be a steel-frame building on an engineered concrete foundation, with appropriate site preparation and excavation, and stand-alone systems. The addition of 26,600 gross square feet will add capacity for approximately 3.1 million print volumes with an adjacent staff work area to accommodate processing activities.

The anticipated building would be designed to fit with the overall design of the current facility, drawing on existing infrastructure where appropriate. Further site improvements will include bioswales and other measures to address storm water runoff and other environmental concerns.

Delivery Model and Schedule

The proposed project will be delivered by the Berkeley campus working in partnership with appropriate stakeholders across the UC system. The probable delivery method will be Construction Manager at Risk or Design-Build, to be determined during the preliminary plans phase.

It is anticipated that the proposed project will be submitted to the Regents for full budget

COMMITTEE

September 13, 2017

approval in November, and funding for construction and equipment for this project will be submitted as part of the 2018-19 Budget for State Capital Outlay submittal to the Regents. It is anticipated that approval of design pursuant to the California Environmental Quality Act will be pursued through the Delegated Process. Completion is projected for May 2020.

Funding Plan

The project’s preliminary plans and working drawings will be funded from Strategic Priority Reserves resulting from one-time budget savings in prior year(s). Construction and equipment will be funded from external financing supported with State appropriations.

Key to Acronyms:

CEQA	California Environmental Quality Act
NRLF	Northern Regional Library Facility
RLFs	Regional Library Facilities
SRLF	Southern Regional Library Facility

ATTACHMENTS

Attachment 1: Preliminary Plans Budget

Attachment 2: Project Location Map

Attachment 3: Project Site Map

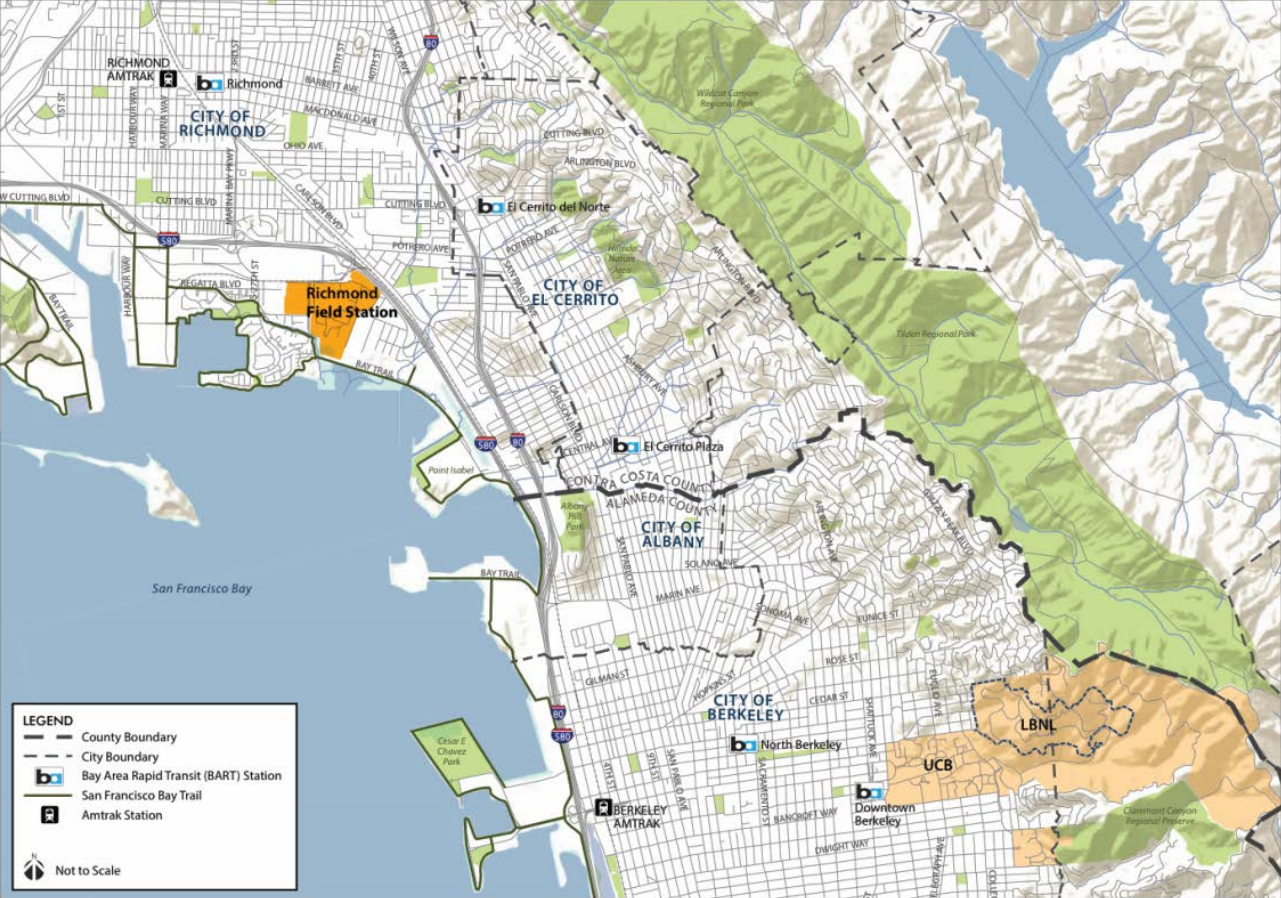
Attachment 4: Alternatives Considered

PRELIMINARY PLANS BUDGET

CATEGORY	AMOUNT	
A/E Fees	\$350,000	58.4%
Campus Project Management	\$150,000	25.0%
Surveys, Test & Plans	\$50,000	8.3%
Special Items	\$50,000	8.3%
TOTAL PRELIMINARY PLANS BUDGET	\$600,000	100%

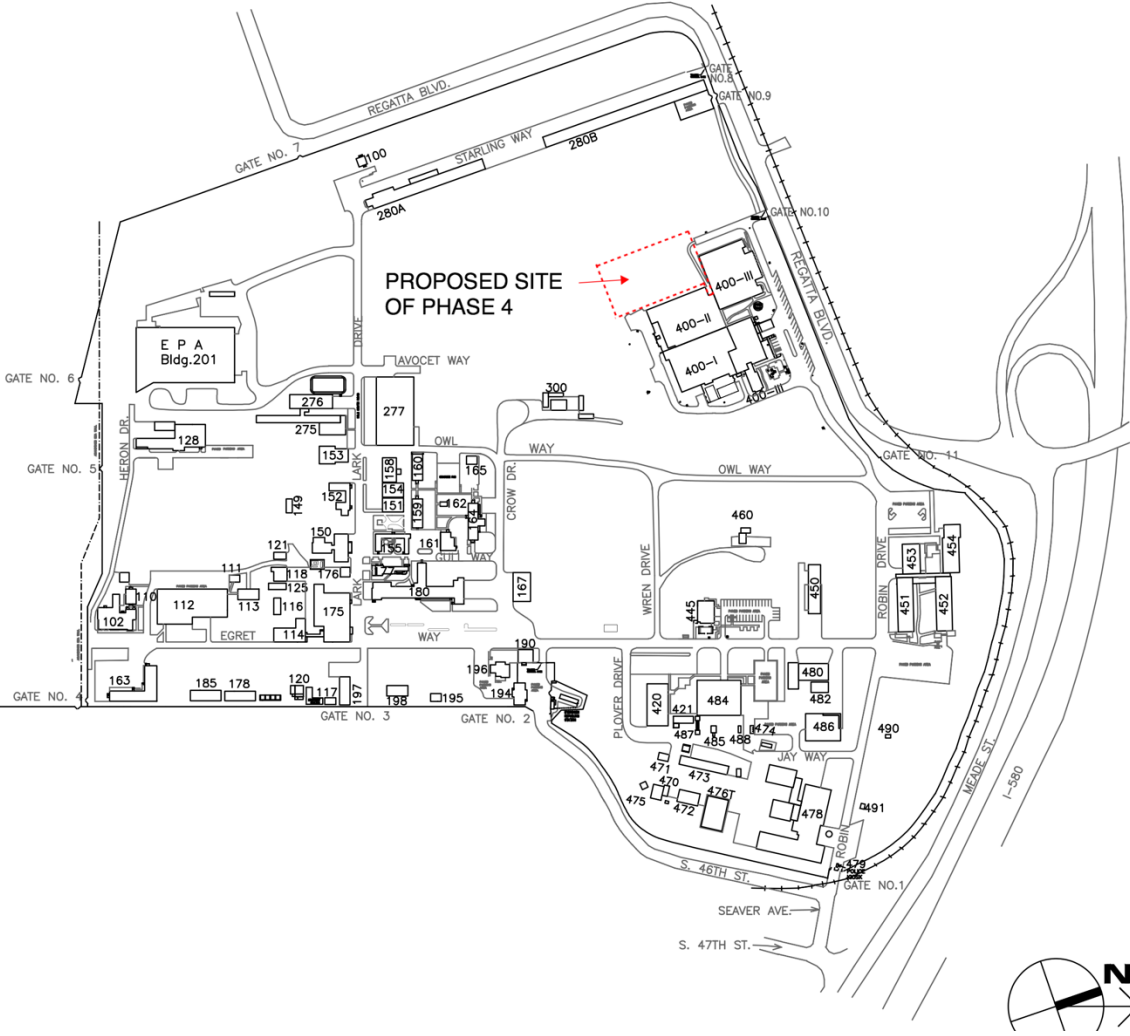
PROJECT LOCATION MAP

Regional Site Map showing UC Berkeley campus and UC Richmond Field Station



PROJECT SITE MAP

UC Richmond Field Station, Richmond, CA showing NRLF Phase 4



ALTERNATIVES CONSIDERED

The UC libraries considered a number of alternative solutions to respond to the ongoing need for storage. These alternatives included: 1) vendor-sourced solutions, 2) non-capital solutions (i.e., to use space differently at the RLFs and on campuses), and 3) capital solutions such as adding on a storage module to NRLF or building a new regional library facility in a lower-cost location.

The alternatives were evaluated using ten criteria:

1. The solution should be architecturally feasible (seismic, fire code, etc.)
2. The solution should support ten years of growth (3.1 million volumes)
3. The solution should minimize operating and capital costs over a 40-year timeframe
4. The solution should build on existing campus programs and services to minimize new costs
5. The solution should meet or exceed service needs for preservation
6. The solution should meet or exceed service needs for security
7. The solution should meet or exceed needs for access to collections
8. The solution should be achievable in a timeframe to meet campus needs (e.g. 2020)
9. The solution does not pose long-term sustainable risk for UC library collections
10. The solution is in alignment with academic needs of the UC community

Using these evaluative criteria, the five potential solutions were analyzed in depth:

1. **Build NRLF Phase 4:** This is the preferred alternative as it meets all evaluation criteria. The feasibility study indicated that the proposed project would meet all seismic and fire code requirements, ensure capacity to meet campus storage needs, and minimize operating costs through the efficient use of space and incorporation within existing building operations and staff workflows. Costs for this capital solution are minimized – as compared to a wholly new RLF – as no new staffing is required for Phase 4. Existing staff will continue the work of receiving new materials. Only incremental operating costs are expected with the expansion. NRLF Phase 4 also ties into existing security, preservation, and access services, and allows UC libraries to manage collections cohesively.
2. **Use commercial storage solutions**
 - a. **Storage vendor:** Multiple external storage provider alternatives were analyzed. External provider models were based on an annual per-volume cost that either bundled access and storage as a single fee or broke out storage and access services as separate pricing. From a cost perspective, vendor models were able to compete with the cost of NRLF Phase 4 in the short term but would exceed the estimated Phase 4 costs over a 40-plus-year timeframe. Vendor models also introduce new security, access, and preservation considerations and would require a strong service agreement to mitigate the risk associated with having an external entity manage a portion of the UC library collection. It is worth noting that the UC libraries store materials on a

- scale that exceeds all other libraries in the country. As a result, well-tested vendor solutions that work at the scale of the RLFs do not exist. The risk associated with developing and testing solutions at the UC-required scale, as well as managing a long-term vendor agreement for high-value collections, is much higher than with a UC-controlled solution. The cost of exiting the service would also be considerable⁴, presenting a stewardship cost to collections over time.
- b. Major retailer storage service:** Storage services through a major online retailer were considered, but the offered solution was designed around short-term needs (i.e. less than six months). There was not sufficient information regarding long-term storage, preservation, and environmental controls or access methods to fully consider this solution. This is an untested solution that may prove viable for future needs.
- 3. Building a new RLF in a different location:** Building a new RLF in an area with potentially lower construction costs was analyzed. An evaluation for a facility in the less expensive area was prepared based on the assumptions in the NRLF Phase 4 feasibility study. The estimate included additional staffing, space, and land acquisition costs. The total cost of construction was approximately \$2 million less than NRLF Phase 4 but operating and staffing costs were higher, resulting in an overall long-term cost nearly 40 percent higher than NRLF Phase 4. This evaluation does not take into account the added cost campuses would face to transport volumes to and from the facility.
- 4. Keep collections on campus:** Without any action, campuses will begin bearing the cost of storing content beginning in 2019. Based on the work of Courant and Nielsen⁵ the annual average cost of keeping a book on campus (as opposed to a high-density facility) is \$4.26 per book, per year. This number was determined to be the average cost in 2009. Adjusting for inflation, that cost would be approximately \$4.77 today. In contrast, the annual average cost of keeping a book in a high-density facility over the same period is \$0.86 (2009 dollars) to \$0.99 (2016 dollars) per book, per year.
- 5. Increasing capacity of existing facilities:** The ability to increase capacity within the existing NRLF facilities, rather than through new construction was measured. Phase 1 was found to be at capacity, Phase 2 was found to have seismic risks associated with the increased weight associated with densification, and Phase 3 was found to have the capacity to handle up to approximately 400,000 more volumes. The feasibility study found that implementing this solution through Phase 3 would require moving over three million items, introducing risks to the operation of the facility and significant moving costs. Given the low yield, long timeline to complete, and relatively high cost, this alternative is not recommended.

⁴ The cost of service exiting would be very high given vendor contract exit costs as well as the need to move and store millions of volumes and find a place to store them.

⁵ Courant, P. and Nielsen, M. (2010). *On the Cost of Keeping a Book*. In *The idea of order: Transforming research collections for 21st century scholarship*. <https://www.clir.org/pubs/reports/pub147/pub147.pdf>

Preferred Alternative

Of the considered solutions, NRLF Phase 4 is the preferred solution. In addition to being the least costly capital solution over a 40-year timeframe, it meets all of the evaluative measures. Of key importance is the fact that all known risks associated with managing collections at a RLF have been addressed and are handled with this solution. By comparison, each of the other alternatives introduces new risks to the collection and to libraries. Other solutions are also more costly.

The review of options found that, due to site constraints, the SRLF cannot grow its building footprint. For this reason, NRLF Phase 4 is being proposed to accept new deposits for the entire UC system once the SRLF fills. The SRLF will continue to accept materials until it fills and will remain open indefinitely as a service point for deposited materials.